

AUTHORIZATION TO DISCHARGE UNDER THE COLORADO DISCHARGE PERMIT SYSTEM

In compliance with the provisions of the *Colorado Water Quality Control Act*, (25-8-101 et seq., CRS, 1973 as amended) and the *Federal Water Pollution Control Act*, as amended (33 U.S.C. 1251 et seq.; the "Act") the

U.S. Energy Corp , Mt Emmons Project


is authorized to discharge from the Mt. Emmons Project located near the center of Section 5, T14S, R86W; latitude 38° 52' 25" North and longitude 107° 02' 28" West; at 2131 County Road, approximately 2½ miles west of Crested Butte via County Road 12 (Kebler Pass Road) to Coal Creek in accordance with effluent limitations, monitoring requirements and other conditions set forth in Part I and II hereof. All discharges authorized herein shall be consistent with the terms and conditions of this permit.

The applicant may demand an adjudicatory hearing within thirty (30) days of the issuance of the final permit determination, per the *Colorado Discharge Permit System Regulations*, 61.7(1). Should the applicant choose to contest any of the effluent limitations, monitoring requirements or other conditions contained herein, the applicant must comply with Section 24-4-104 CRS and the *Colorado Discharge Permit System Regulations*. Failure to contest any such effluent limitation, monitoring requirement, or other condition, constitutes consent to the condition by the Applicant.

This permit and the authorization to discharge shall expire at midnight, **August 31, 2013** .

Amended, Reissued, and Signed this 30th day of November, 2012

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT



Janet Kieler, Permits Section Manager
Water Quality Control Division

Permit Action Summary:

Minor Amendment No. 1: Issued: November 30, 2012 Effective January 1, 2013 (Parts I.A.1.i. and ii., and I.A.2.d.)

Minor Modification No. 2 : Issued and Effective: November 15, 2011 (Project Name Change)

Minor Modification No. 1 : Issued and Effective: September 5, 2008 (Parts I.A.1.iv; I.B.2.1.c, and I.A.2.d.ii)

Originally Issued: July 30, 2008, Effective September 1, 2008, Expiration August 31, 2013

TABLE OF CONTENTS

PART I	3
A. DEFINITION OF EFFLUENT LIMITATIONS	3
1. Effluent Limitations	3
2. Whole Effluent Toxicity - Chronic Lethality Limitations at Outfalls 001A and 001B	6
3. Compliance Schedules	7
4. Chronic WET Testing-Outfalls 001A and 001B	8
B. MONITORING REQUIREMENTS	10
1. Frequency and Sample Type	10
2. Salinity Parameters	12
C. DEFINITIONS OF TERMS	12
D. SPECIAL REQUIREMENTS	14
1. Materials Containment Plan	14
2. Salinity Study	15
3. Reopener Clause	15
E. GENERAL MONITORING, SAMPLING AND REPORTING REQUIREMENTS	16
1. Routine Reporting of Data	16
2. Representative Sampling	16
3. Analytical and Sampling Methods for Monitoring	16
4. Records	17
5. Flow Measuring Device	17
6. Signatory and Certification Requirements	18
PART II	19
A. NOTIFICATION REQUIREMENTS	19
1. Notification to Parties	19
2. Change in Discharge	19
3. Special Notifications - Definitions	19
4. Noncompliance Notification	20
5. Other Notification Requirements	20
6. Bypass Notification	21
7. Upsets	21
8. Discharge Point	22
9. Proper Operation and Maintenance	22
10. Minimization of Adverse Impact	22
11. Removed Substances	22
12. Submission of Incorrect or Incomplete Information	22
13. Bypass	22
14. Reduction, Loss, or Failure of Treatment Facility	23
B. RESPONSIBILITIES	23
1. Inspections and Right to Entry	23
2. Duty to Provide Information	23
3. Transfer of Ownership or Control	23
4. Availability of Reports	24
5. Modification, Suspension, Revocation, or Termination of Permits By the Division	24
6. Oil and Hazardous Substance Liability	26
7. State Laws	26
8. Permit Violations	26
9. Property Rights	26
10. Severability	26
11. Renewal Application	26
12. Confidentiality	27
13. Fees	27
14. Duration of Permit	27
15. Section 307 Toxics	27
16. Antibacksliding	27
17. Effect of Permit Issuance	28

PART I

A. DEFINITION OF EFFLUENT LIMITATIONS

1. Effluent Limitations

i. Outfall 001A

Beginning no later than the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from **Outfall 001A – the discharge from October through June from the Mt Emmons Project treated water pipeline from Industrial WTP prior to entrance into the concrete box.**

In accordance with the Water Quality Control Commission *Regulations for Effluent Limitations*, Section 62.5, and the *Colorado Discharge Permit System Regulations*, Section 61.8(2), 5 C.C.R. 1002-61, the permitted discharge shall not contain effluent parameter concentrations which exceed the following limitations specified below or exceed the specified flow limitation.

<u>Effluent Parameter</u>	<u>Effluent Limitations at Outfall 001A</u>		
	<u>Maximum Concentrations</u>		
	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>
Flow, MGD	0.675	NA	Report
Total Suspended Solids (TSS),	30	45	NA
pH, s.u. (minimum-maximum)	NA	NA	6.5-9
Oil and Grease, mg/l	NA	NA	10
Total Recoverable Aluminum, µg/l	Report	NA	Report
Total Arsenic, µg/l	Report	NA	Report
Potentially Dissolved Cadmium, µg/l			
Effective until June 30, 2013	Report	NA	1.9
Effective July 1, 2013	1.1	NA	1.9
Potentially Dissolved Copper,	Report	NA	Report
Potentially Dissolved Lead, µg/l	Report	NA	Report
Total Mercury, µg/l	Report	NA	Report
Potentially Dissolved Zinc,	Report	NA	390
Total Dissolved Solids, mg/l	Report	NA	Report
Whole Effluent Toxicity, Chronic Lethality	NA	NA	Statistical Difference & IC25 \geq IWC

See Part I.C. for Definitions.

ii. Outfall 001B

Beginning no later than the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from **Outfall 001B – the discharge from July through September from the Mt. Emmons Project inactive mining operation at the same location as Outfall 001A.**

In accordance with the Water Quality Control Commission *Regulations for Effluent Limitations*, Section 62.5, and the *Colorado Discharge Permit System Regulations*, Section 61.8(2), 5 C.C.R. 1002-61, the permitted discharge shall not contain effluent parameter concentrations which exceed the following limitations specified below or exceed the specified flow limitation.

<u>Effluent Parameter</u>	<u>Effluent Limitations at Outfall 001B</u>		
	<u>Maximum Concentrations</u>		
	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>
Flow, MGD	0.750	NA	Report
Total Suspended Solids (TSS),	30	45	NA
pH, s.u. (minimum-maximum)	NA	NA	6.5-9
Oil and Grease, mg/l	NA	NA	10
Total Recoverable Aluminum, µg/l	Report	NA	Report
Total Arsenic, µg/l	Report	NA	Report
Potentially Dissolved Cadmium, µg/l			
Effective until June 30, 2013	Report	NA	1.9
Effective July 1, 2013	1.1	NA	1.9
Potentially Dissolved Copper, µg/l	Report	NA	Report
Potentially Dissolved Lead, µg/l	Report	NA	Report
Total Mercury, µg/l	Report	NA	Report
Potentially Dissolved Zinc,	Report	NA	390
Total Dissolved Solids, mg/l	Report	NA	Report
Whole Effluent Toxicity, Chronic Lethality	NA	NA	Statistical Difference & IC25 \geq IWC

See Part I.C. for Definitions.

iii. Outfall MON1

Beginning no later than the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from **Outfall MON1 – the discharge from the Mt. Emmons Project inactive mining operation at the the same location as Outfalls 001A and 001B.**

In accordance with the Water Quality Control Commission *Regulations for Effluent Limitations*, Section 62.5, and the *Colorado Discharge Permit System Regulations*, Section 61.8(2), 5 C.C.R. 1002-61, the permitted discharge shall not contain effluent parameter concentrations which exceed the following limitations specified below or exceed the specified flow limitation.

<u>Effluent Parameter</u>	<u>Effluent Limitations at Outfall MON1</u>		
	<u>Maximum Concentrations</u>		
	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>
Potentially Dissolved Trivalent Chromium, µg/l	Report	NA	Report
Total Recoverable Iron, µg/l	Report	NA	Report
Potentially Dissolved Manganese, µg/l	Report	NA	Report
Potenitally Dissolved Nickel, µg/l	Report	NA	Report
Potentially Dissolved Selenium, µg/l	Report	NA	Report
Potentially Dissolved Silver, µg/l	Report	NA	Report

See Part I.C. for Definitions.

iv. Outfalls MON2 and MON3

Beginning no later than the effective date of this permit and lasting through the expiration date, the permittee is authorized to discharge from **Outfalls MON2 and MON3. From MON2 – at a location in the unlined channel (containing effluent from Outfalls 001A and 001B) approximately 100 feet upstream from the confluence with the North Interceptor Channel and approximately 150 feet before passing under County Road 12 (Kebler Pass Road). The latitude and longitude are identified as 38.867644 and -107.023679. From MON3 – In the North Interceptor Channel approximately 100 feet upstream from the confluence with the unlined channel (which contains Outfalls 001A and 001B effluent and the MON2 sampling location) and approximately 150 feet before passage under County Road 12 (Kebler Pass Road). The latitude and longitude are identified as 38.868234 and -107.024641.**

In accordance with the Water Quality Control Commission *Regulations for Effluent Limitations*, Section 62.5, and the *Colorado Discharge Permit System Regulations*, Section 61.8(2), 5 C.C.R. 1002-61, the permitted discharge shall not contain effluent parameter concentrations which exceed the following limitations specified below or exceed the specified flow limitation.

<u>Effluent Parameter</u>	<u>Effluent Limitations at Outfalls MON2 and MON3</u>		
	<u>Maximum Concentrations</u>		
	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>
Total Recoverable Aluminum, µg/l	Report	NA	Report
Total Arsenic, µg/l	Report	NA	Report
Potentially Dissolved Cadmium, µg/l	Report	NA	Report
Potentially Dissolved Trivalent Chromium, µg/l	Report	NA	Report
Potentially Dissolved Copper, µg/l	Report	NA	Report
Total Recoverable Iron, µg/l	Report	NA	Report
Potentially Dissolved Lead, µg/l	Report	NA	Report
Potentially Dissolved Manganese, µg/l	Report	NA	Report
Total Mercury, µg/l	Report	NA	Report
Potentially Dissolved Nickel, µg/l	Report	NA	Report
Potentially Dissolved Selenium, µg/l	Report	NA	Report
Potentially Dissolved Silver, µg/l	Report	NA	Report
Potentially Dissolved Zinc, µg/l	Report	NA	Report
Flow, mgd	Report	NA	Report
Net Flow, mgd (Outfall MON2, only)	Report	NA	Report
pH, s.u. (minimum-maximum)	NA	NA	Report (min-max)

See Part I.C. for Definitions.

2. Compliance Schedules

All information and written reports required by the following compliance schedules shall be directed to the Permits Section for final review unless otherwise stated.

- a. Materials Containment Plan: **Within 90 days** of the effective date of the permit, the permittee shall submit an update to the permittee's Materials Containment Plan. For specific requirements, refer to Part I.D.1. of the permit.
- b. Salinity Study: By **November 30, 2008**, the permittee shall submit a salinity study. For specific requirements, refer to Part I.D.2. of the permit.
- c. Mixing Zone Analyses: The permittee shall conduct remaining threshold tests for exclusion from further analysis under Mixing Zone Regulations. The second threshold test is the Application of the Mixing Zone Exclusion Tables (p. 20, *Colorado Mixing Zone Implementation Guidance*, February 2002). Under this compliance action, the permittee will collect the necessary site-specific data, perform the required analysis, and submit the study results in a report to the Division by **October 31, 2008**. The report will indicate the findings of this threshold test and, if not excluded, provide the workplan for the next threshold test (i.e., determining of the size of the physical and regulatory mixing zones).
- d. Metals Study Plans
 - i. By **October 31, 2008**, the permittee shall submit a study plan for approval. The study plan must consider the site-specific factors of the wastestream and the facility treatment, along with any other appropriate factors, such that compliance can be attained with the final dissolved cadmium limitations.
 - ii. By **December 31, 2008**, the permittee shall begin implementing the approved study plan for cadmium such that compliance with the final dissolved cadmium limitations may be attained.
 - iii. By **December 31, 2009**, the permittee shall submit a progress report summarizing the progress in implementing the approved study plan for cadmium such that compliance with the final dissolved cadmium limitations may be attained.
 - iv. By **December 31, 2010**, the permittee shall submit a second progress report summarizing the progress in implementing the approved study plan for cadmium such that compliance with the final dissolved cadmium limitations may be attained.
 - v. By **December 31, 2011**, the permittee shall submit a third progress report summarizing the progress in implementing the approved study plan for cadmium such that compliance with the final dissolved cadmium limitations may be attained.
 - vi. By **December 31, 2012**, the permittee shall submit a fourth progress report summarizing the progress in implementing the approved study plan for cadmium such that compliance with the final dissolved cadmium limitations may be attained.
 - vii. By **June 30, 2013**, the permittee shall submit study results that show compliance has been attained with the final dissolved cadmium limitations.

No later than 14 calendar days following each date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

See Part I.C. for Definitions.

3. **Chronic WET Testing-Outfalls 001A and 001B**

a. Testing and Reporting Requirements

Tests shall be done at the frequency listed in Part I.B.1. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the reporting period during which the sample was taken. (i.e., WET testing results for the first calendar quarter ending March 31 shall be reported with the DMR due April 28.) The results shall be submitted on the Chronic Toxicity Test report form, available from the Division. Copies of these reports are to be submitted to both the Division and EPA along with the DMR.

The permittee shall conduct each chronic WET test in general accordance with methods described in Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA/600/4-89/001 or the most current edition, except as modified by the most current Division guidance document entitled Guidelines for Conducting Whole Effluent Toxicity Tests. The permittee shall conduct such tests using *Ceriodaphnia dubia* and fathead minnows.

b. Failure of Test and Division Notification

A chronic WET test is failed whenever 1) there is a statistically significant difference in lethality between the control and any effluent concentration less than or equal to the instream waste concentration ("IWC") and, 2) the IC25, which represents an estimate of the effluent concentration at which 25% of the test organisms demonstrate inhibition as reflected by lethality, is at any effluent concentration less than or equal to the IWC. The IWC for this permit has been determined to be **48% at Outfall 001A and 43% at Outfall 001B**. The permittee must provide written notification of the failure of a WET test to the Division, along with a statement as to whether a Preliminary Toxicity Investigation (PTI)/Toxicity Identification Evaluation (TIE) or accelerated testing is being performed. **Notification must be received by the Division within 21 calendar days of the demonstration of chronic WET in the routine required test.** Demonstration for the purposes of Parts I.A.4.b., c., d., and e. means no later than the last day of the laboratory test.

c. Automatic Compliance Schedule Upon Failure of Test

If a routine chronic WET test is failed, the following automatic compliance schedule shall apply. As part of this, the permittee shall either:

- i. Proceed to conduct the PTI/TIE investigation as described in Part I.A.4.d, or
- ii. Conduct accelerated testing using the single species found to be more sensitive.

If accelerated testing is being performed, the permittee shall provide written notification of the results within 14 calendar days of completion of the Pattern of Toxicity/No Toxicity demonstration. Testing will be at least once every two weeks for up to five tests until; 1) two consecutive tests fail or three of five tests fail, in which case a pattern of toxicity has been demonstrated or 2) two consecutive tests pass or three of five tests pass, in which case no pattern of toxicity has been found. If no pattern of toxicity is found the toxicity episode is considered to be ended and routine testing is to resume. If a pattern of toxicity is found, a PTI/TIE investigation is to be performed. If a pattern of toxicity is not demonstrated but a significant level of erratic toxicity is found, the Division may require an increased frequency of routine monitoring or some other modified approach.

See Part I.C. for Definitions.

d. PTI/TIE

The results of the PTI/TIE investigation are to be received by the Division within 120 days of the demonstration of chronic WET in the routine test, as defined above, or if accelerated testing is performed, the date the pattern of toxicity is demonstrated. A status report is to be provided to the Division at the 30, 60 and 90 day points of the PTI/TIE investigation. The Division may extend the time frame for investigation where reasonable justification exists. A request for an extension must be made in writing and received prior to the 120 day deadline. Such request must include a justification and supporting data for such an extension.

The permittee may use the time for investigation to conduct a PTI or move directly into the TIE. A PTI consists of a brief search for possible sources of WET, which might reveal causes of such toxicity and appropriate corrective actions more simply and cost effectively than a formal TIE. If the PTI allows resolution of the WET incident, the TIE need not necessarily be conducted. If, however, WET is not identified or resolved during the PTI, the TIE must be conducted within the allowed 120 day time frame.

Any permittee that is required to conduct a PTI/TIE investigation shall do so in conformance with procedures identified in the following documents, or as subsequently updated: 1) Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I, EPA/600/6-91/005F May 92, 2) Methods for Aquatic Toxicity Identification Evaluations, Phase I Toxicity Characterization Procedures, EPA/600/6-91/003 Feb. 91 and 3) Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures, EPA/600/3-88/035 Feb. 1989.

A fourth document in this series is Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures, EPA/600/3-88/036 Feb. 1989. As indicated by the title, this procedure is intended to confirm that the suspected toxicant is truly the toxicant. This investigation is optional.

Within 90 days of the determination of the toxicant or no later than 210 days after demonstration of toxicity, whichever is sooner, a control program is to be developed and received by the Division. The program shall set down a method and procedure for elimination of the toxicity to acceptable levels.

e. Request For Relief

The permittee may request relief from further investigation and testing where the toxicant has not been determined and suitable treatment does not appear possible. In requesting such relief, the permittee shall submit material sufficient to establish the following:

- i. It has complied with terms and conditions of the permit compliance schedule for the PTI/TIE investigation and other appropriate conditions as may have been required by the WQCD;
- ii. During the period of the toxicity incident it has been in compliance with all other permit conditions, including, in the case of a POTW, pretreatment requirements;
- iii. During the period of the toxicity incident it has properly maintained and operated all facilities and systems of treatment and control; and
- iv. Despite the circumstances described in paragraphs (i) and (iii) above, the source and/or cause of toxicity could not be located or resolved.

If deemed appropriate by the Division, the permit or the compliance schedule may be modified to revise the ongoing monitoring and toxicity investigation requirements to avoid an unproductive expenditure of the permittee's resources, provided that the underlying obligation to eliminate any continuing exceedance of the toxicity limit shall remain.

See Part I.C. for Definitions.

B. MONITORING REQUIREMENTS

1. Frequency and Sample Type

In order to obtain an indication of the probable compliance or noncompliance with the effluent limitations specified in Part I.A.1, the permittee shall monitor all effluent parameters at the following frequencies. Such monitoring will begin immediately and last for the life of the permit unless otherwise noted. The results of such monitoring shall be reported on the Discharge Monitoring Report form (See Part I.E.1.)

If the permittee, using the approved analytical methods, monitors any parameter more frequently than required by this permit, then the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (DMRs) or other forms as required by the Division. Such increased frequency shall also be indicated.

a. Outfalls 001A and 001B

<u>Effluent Parameter</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow, MGD	Continuous	Recorder
Total Suspended Solids (TSS), mg/l	Quarterly	Composite
pH, s.u. (minimum-maximum)	2 Days/Month	Grab
Oil and Grease, mg/l	Quarterly	Visual
Total Recoverable Aluminum, µg/l	Weekly	Composite
Total Arsenic, µg/l	Quarterly	Composite i/
Potentially Dissolved Cadmium, µg/l	Weekly	Composite i/
Potentially Dissolved Copper, µg/l	Quarterly	Composite i/
Potentially Dissolved Lead, µg/l	Quarterly	Composite i/
Total Mercury, µg/l	Quarterly	Composite i/
Potentially Dissolved Zinc, µg/l	Quarterly	Composite i/
Total Dissolved Solids, mg/l	Quarterly	Grab
Whole Effluent Toxicity, Chronic	Quarterly	3 Composites/Test

i/ This parameter is subject to "Noncompliance Notification" requirements of Part II.A.4.b.(4) of this permit for violations of the Daily Maximum limitation for this parameter.

Self-monitoring sampling by the permittee for compliance with the monitoring requirements specified above shall be performed at the following location: **Outfall 001A – During the period from October through June, at the treated water pipeline from Industrial WWTP prior to entrance into the concrete box. Outfall 001B – During the period from July through September, at the same location as Outfall 001A.**

See Part I.C. for Definitions.

b. Outfall MON1

<u>Effluent Parameter</u>	<u>Frequency</u>	<u>Sample Type</u>
Potentially Dissolved Trivalent Chromium, µg/l	Monthly	Grab
Total Recoverable Iron, µg/l	Monthly	Grab
Potentially Dissolved Manganese, µg/l	Monthly	Grab
Potentially Dissolved Nickel, µg/l	Monthly	Grab
Potentially Dissolved Selenium, µg/l	Monthly	Grab
Potentially Dissolved Silver, µg/l	Monthly	Grab

Self-monitoring sampling by the permittee for compliance with the monitoring requirements specified above shall be performed at the following location: **MON1 – at the same location as Outfalls 001A and 001B.**

c. Outfalls MON2 and MON3

<u>Effluent Parameter</u>	<u>Frequency</u>	<u>Sample Type</u>
Total Recoverable Aluminum, µg/l	Quarterly	Concurrent Grab
Total Arsenic, µg/l	Quarterly	Concurrent Grab
Potentially Dissolved Cadmium, µg/l	Quarterly	Concurrent Grab
Potentially Dissolved Trivalent Chromium, µg/l	Quarterly	Concurrent Grab
Potentially Dissolved Copper, µg/l	Quarterly	Concurrent Grab
Total Recoverable Iron, µg/l	Quarterly	Concurrent Grab
Potentially Dissolved Lead, µg/l	Quarterly	Concurrent Grab
Potentially Dissolved Manganese, µg/l	Quarterly	Concurrent Grab
Total Mercury, µg/l	Quarterly	Concurrent Grab
Potentially Dissolved Nickel, µg/l	Quarterly	Concurrent Grab
Potentially Dissolved Selenium, µg/l	Quarterly	Concurrent Grab
Potentially Dissolved Silver, µg/l	Quarterly	Concurrent Grab
Potentially Dissolved Zinc, µg/l	Quarterly	Concurrent Grab
Flow, mgd	Quarterly	Instantaneous
Net Flow, mgd (Outfall MON2, only)	Quarterly	Calculate
pH, s.u. (minimum-maximum)	Quarterly	Concurrent Grab

Self-monitoring sampling by the permittee for compliance with the monitoring requirements specified above shall be performed at the following locations: **From MON2 – at a location in the unlined channel (containing effluent from Outfalls 001A and 001B) approximately 100 feet upstream from the confluence with the North Interceptor Channel and approximately 150 feet before passing under County Road 12 (Kebler Pass Road). The latitude and longitude are identified as 38.867644 and -107.023679. From MON3 – In the North Interceptor Channel approximately 100 feet upstream from the confluence with the unlined channel (which contains Outfalls 001A and 001B effluent and the MON2 sampling location) and approximately 150 feet before passage under County Road 12 (Kebler Pass Road). The latitude and longitude are identified as 38.868234 and -107.024641.**

See Part I.C. for Definitions.

d. Oil and Grease Monitoring

For every outfall with oil and grease monitoring, in the event an oil sheen or floating oil is observed, a grab sample shall be collected, analyzed, and reported on the appropriate DMR. In addition, corrective action shall be taken immediately to mitigate the discharge of oil and grease. A description of the corrective action taken should be included with the DMR.

e. Monitoring Suspension

During the winter season, monitoring may be suspended at the permittee's option when adverse weather conditions prohibit safe access for the entire quarter at Outfalls MON2 or MON3. Monitoring shall recommence at the first opportunity after such inaccessibility ends. When inaccessibility prevents sample collection for the entire quarter, the permittee shall document what monitoring was missed and the specific conditions that prevented access in cover letters to the appropriate Discharge Monitoring Reports.

2. Salinity Parameters

In order to obtain an indication of the quantity of Salinity, measured as total dissolved solids (TDS), being discharged from the site the permittee shall monitor the wastewater effluent at the following frequencies:

<u>Outfall</u>	<u>Frequency</u>	<u>Sample Type</u>
001A and 001B	Quarterly	Grab

Self-monitoring samples taken in compliance with the monitoring requirements specified above shall be taken at those locations listed in Part I.B.1.

Where, based on a minimum of 5 samples, the permittee demonstrates to the satisfaction of the Division that the level of total dissolved solids (TDS) in the effluent can be calculated based upon the level of electrical conductivity, the permittee may measure and report TDS in terms of electrical conductivity.

C. DEFINITIONS OF TERMS

1. Antidegradation limits apply as the average of all data collected for months in that group during a rolling 24-month period. These limits become effective after data has been collected for all months in the group during the 24 months following permit issuance. Where antidegradation groups are not indicated, data from all months will be utilized to determine the reported value and the limit will become effective in the 24th month in which the permit is effective.
2. "Chronic lethality" occurs when a statistically significant difference, at the 95% confidence level, occurs in the chronic test between the mortality of the test species and the control. **For Outfall 001A, the IWC is 48% effluent (the chronic IWC = 48%) and at Outfall 001B, the IWC is 43% effluent (the chronic IWC = 43%).**
3. "Composite" sample is a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow.
4. "Concurrent" grab sampling means that on the same day that grab samples are collected at MON2 and MON3, composite sampling is conducted at Outfalls 001A or 001B and grab samples are collected at MON1.
5. "Continuous" measurement is a measurement obtained from an automatic recording device which continually measures provides measurements.
6. "Daily Maximum limitation" means the limitation for this parameter shall be applied as an instantaneous maximum (or, for pH or DO, instantaneous minimum) value. The instantaneous value is defined as the analytical result of any individual sample. DMRs shall include the maximum (and/or minimum) of all instantaneous values within the calendar month. Any instantaneous value beyond the noted daily maximum limitation for the indicated parameter shall be considered a violation of this permit.

7. "Dissolved (D) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a water and suspended sediment sample which passed through a 0.40 or 0.45 UM (micron) membrane filter. Determinations of "dissolved" constituents are made using the filtrate. This may include some very small (colloidal) suspended particles which passed through the membrane filter as well as the amount of substance present in true chemical solution.
8. "Grab" sample, is a single "dip and take" sample so as to be representative of the parameter being monitored.
9. "In-situ" measurement is defined as a single reading, observation or measurement taken in the field at the point of discharge.
10. "Instantaneous" measurement is a single reading, observation, or measurement performed on site using existing monitoring facilities.
11. "Net flow" means the value calculated based on the instantaneous flow measured at Outfall MON1 minus the instantaneous flow estimated at Outfall MON2.
12. "Potentially dissolved (PD) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a constituent measured from the filtrate of a water and suspended sediment sample that was first treated with nitric acid to a pH of 2 or less and let stand for 8 to 96 hours prior to sample filtration using a 0.40 or 0.45-UM (micron) membrane filter. Note the "potentially dissolved" method cannot be used where nitric acid will interfere with the analytical procedure used for the constituent measured.
13. "Quarterly measurement frequency" means samples may be collected at any time during the calendar quarter if a continual discharge occurs. If the discharge is intermittent, then samples shall be collected during the period that discharge occurs.
14. "Recorder" requires the continuous operation of a chart and/or totalizer (or drinking water rotor meters or pump hour meters where previously approved.)
15. "Seven (7) day average" means, with the exception of fecal coliform bacteria, the arithmetic mean of all samples collected in a seven (7) consecutive day period. For fecal coliform bacteria, it is the geometric mean of all samples taken in a seven (7) consecutive day period. Such seven (7) day averages shall be calculated for all calendar weeks, which are defined as beginning on Sunday and ending on Saturday. If the calendar week overlaps two months (i.e. the Sunday is in one month and the Saturday in the following month), the seven (7) day average calculated for that calendar week shall be associated with the month that contains the Saturday. Samples may not be used for more than one (1) reporting period. (Not applicable to fecal coliform determinations.)
16. "Thirty (30) day average" means, except for fecal coliform or *E. coli* bacteria, the arithmetic mean of all samples collected during a thirty (30) consecutive-day period. For the purpose of calculating the average concentration, zero should be used in place of any value that is less than the reporting limit. For fecal coliform or *E. coli* bacteria, it is the geometric mean of all samples collected in a thirty (30) day period. For the purpose of calculating the geometric mean, a value of one should be used in place of any value that is less than the reporting limit. If all values are less than the reporting limit, "< x" should be reported, where "x" is the reporting limit. The permittee shall report the appropriate mean of all self-monitoring sample data collected during the calendar month on the Discharge Monitoring Reports. Samples shall not be used for more than one (1) reporting period.
17. "Total Metals" means the concentration of metals determined on an unfiltered sample following vigorous digestion (Section 4.1.3), or the sum of the concentrations of metals in both the dissolved and suspended fractions, as described in "*Manual of Methods for Chemical Analysis of Water and Wastes*," U.S. Environmental Protection Agency, March 1979, or its equivalent.
18. "Total Recoverable Metals" means that portion of a water and suspended sediment sample measured by the total recoverable analytical procedure described in "*Methods for Chemical Analysis of Water and Wastes*," U.S. Environmental Protection Agency, March 1979 or its equivalent.
19. "Twice Per Month" means that two samples shall be collected each calendar month on separate weeks with at least one full week between the two sample dates. Also, there shall be at least one full week between the second sample of a month and the first sample of the following month.

20. "Visual" observation is observing the discharge to check for the presence of a visible sheen or floating oil.
21. "Water Quality Control Division" or "Division" means the state Water Quality Control Division as established in 25-8-101 et al.)

Additional relevant definitions are found in the Colorado Water Quality Control Act, CRS §§ 25-8-101 et seq., the Colorado Discharge Permit System Regulations, Regulation 61 (5 CCR 1002-61) and other applicable regulations.

D. SPECIAL REQUIREMENTS

1. Materials Containment Plan

Pursuant to Sections 61.8(3)(g) and (r) of the Colorado Discharge Permit System Regulations, the permittee is required to submit a Materials Containment Plan. Such a plan was previously submitted to the Division. An update of the plan shall be submitted to the Division within ninety (90) days after the effective date of this permit and must be implemented. The update of the plan shall include changes in the information and procedures for the prevention and containment of spills of materials used, processed or stored at the facility which if spilled would have a reasonable probability of having a visible or otherwise detrimental impact on waters of the State ^{1/2/}. The updated plan shall include, but not necessarily be limited to:

- a. An updated history of the spills which have occurred in the three (3) years preceding the effective date of this permit. The history shall include a discussion on the cause of the spills and a the preventative measures designed to eliminate them from reoccurring;
- b. An update of the reporting system which will be used to notify, at a minimum, responsible facility management, the Division, the Environmental Protection Agency, downstream water users within 5 miles downstream of the facility, and local health officials;
- c. A description of any changes in the preventative facilities (including overall facility plot) which prevent, contain, or treat spills and unplanned discharges;
- d. A current list which includes the volumes or quantities of all materials used, processed, or stored at the facility which represent a potential spill threat to surface waters. The location of stored material shall be indicated on the facility plot submitted for item c;
- e. An implementation schedule for additional facilities which might be required in item c, but which are not yet operational;
- f. A current list of available outside contractors, agencies, or other sources which could be utilized in the event of a spill in order to clean up its effects. If the facility is capable of handling spills in-house, this shall be documented in the plan;
- g. Provision for yearly review and updating of the contingency plan, plus resubmission of the plan to the Division if conditions and/or procedures at the facility change the original plan.

The foregoing provisions shall in no way render inapplicable those requirements imposed by Federal Water Pollution Control Act, 33 U.S.C. § 1321, regulations promulgated thereunder, the Colorado Water Quality Control Act, and regulations promulgated thereunder. It is recommended that this plan be prepared by a professional engineer registered in the State of Colorado.

Nothing herein contained shall be construed as allowing any discharge to waters of the State other than through the discharge points specifically authorized in this permit. Nothing herein contained shall be construed as excusing any liability the permittee might have, civil or criminal, for any spill.

The submittal of a Spill Prevention Control and Countermeasure Plan (SPCC Plan) as required by 40 CFR Part 112 may satisfy all or part of this requirement. Should additional materials exist on site which are not addressed in the SPCC Plan, addressing those materials as per the above is required.

^{1/} If there is no such material present at the site, this shall be indicated in writing and submitted to the Division for review.

- 2/ If there is material present but the permittee feels there is not a reasonable probability of a spill impacting waters of the State, this shall be documented in writing and submitted to the Division for review. This documentation shall include; 1) distance to nearest surface waters, and; 2) a detailed description of any structure which prohibits the release of material onto the ground or into a conveyance system.

2. Salinity Study

The facility shall submit a Salinity Study comprised of the following information:

- a. Existing annual tonnage of salt discharged and effluent discharge flow rates.
- b. Cost of modifying all wastewater treatment facilities, if applicable, to provide for no salt discharge.
- c. Cost of salt minimization.
- d. Description of water rights, including diversion and consumptive use quantities and the compatibility of Colorado water laws with either the complete elimination of a salt discharge or any plan for minimizing a salt discharge.
- e. Alternative plans that could reduce or eliminate salt discharge. Alternative plans shall include:
 - i. Description of the quantity and the quality of the proposed discharge(s).
 - ii. Description of how salts removed from discharge(s) shall be disposed of to prevent such salts from entering surface waters or ground water aquifers.
 - iii. Costs of alternative plans in dollars per ton of salt removed.
 - iv. Of the alternatives, a statement as to the one plan for reduction of salt discharge that the permittee recommends be adopted.
- f. Such other information pertinent to demonstration of nonpracticability as the Division may deem necessary.

A permittee desiring such consideration must provide detailed information including a description of the topography, geology, and hydrology. Such information must include direction and rate of ground-water flow and the chemical quality and quantity of surface streams and springs that might be affected. If the information adequately demonstrates that the ground water to be intercepted normally would reach the river system in a reasonable time frame and would contain approximately the same or greater salt load than if not intercepted, and if no significant localized problems would be created, then the Division may waive the "no-salt" discharge requirement.

In determining what permit conditions shall be required, where no discharge is determined to be impracticable, the Division shall consider the items as follows:

- g. The impact of the total proposed salt discharge of each alternative on the lower mainstem in terms of both tons per year and concentration load.
- h. Costs per ton of salt removed from the discharge for each plan alternative.
- i. The compatibility of state water laws with each alternative.
- j. Capability of minimizing the discharge of salt.
- k. The localized impact of the discharge
- l. The minimization of salt discharges and the preservation of fresh water by using intercepted ground water for industrial processes, dust control, etc., whenever it is economically feasible and environmentally sound.
- m. The annual cost of facility modification in terms of dollars per ton of salt removed for:
 - i. No salt return
 - ii. Minimizing salt return.

The Salinity Study requirements are set forth in this compliance schedule. During the study, the facility shall continue to monitor for total dissolved solids on a quarterly basis. Samples shall be taken at Outfalls 008A and 008B.

3. Reopener Clause

Current state legislation does not include express authority for the Water Quality Commission to require a financial warranty as a requirement before the Water Quality Control Division permits a discharge to state waters. If legislation is enacted to specifically express this authority for the WQCC, then the WQCD will reopen this permit and add the requirements for the permittee to provide financial warranty.

E. GENERAL MONITORING, SAMPLING AND REPORTING REQUIREMENTS

1. Routine Reporting of Data

Reporting of the data gathered in compliance with Part I.B.1 shall be on a **monthly** basis. Reporting of all data gathered shall comply with the requirements of Part I.E. (General Requirements). Monitoring results shall be summarized for each calendar month and reported on Division approved discharge monitoring report (DMR) forms (EPA form 3320-1). The forms shall be mailed to the agencies listed below so they are received no later than the 28th day of the following month (for example, the DMR for the first calendar quarter must be received by the Division by April 28th). If no discharge occurs during the reporting period, "No Discharge" shall be reported.

The DMR forms consist of four pages - the top "original" copy, and three attached no-carbon-required copies. After the DMR form has been filled out and signed, the four copies must be separated and distributed as follows:

The first **original** signed copy of each discharge monitoring report (DMR) shall be submitted to the Division at the following address:

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Additional copies are for the permittee records. The Discharge Monitoring Report forms shall be filled out accurately and completely in accordance with requirements of this permit and the instructions on the forms. They shall be signed by an authorized person as identified in Part I.E.6.

Calculations for all limitations which require the averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Division in the permit.

2. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and approval by the Division.

If the permittee monitors at the point of discharge any pollutant limited by the permit more frequently than required by the permit, using approved test procedures or as specified in the permit, the result of this monitoring shall be included in the calculation and reporting of data to the Division.

3. Analytical and Sampling Methods for Monitoring

The permittee shall install, calibrate, use and maintain monitoring methods and equipment, including biological and indicated pollutant monitoring methods. All sampling shall be performed by the permittee according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the Division, in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136. **The analytical method selected for a parameter shall be the one that can measure the lowest detected limit for that parameter unless the permit limitation or stream standard for those parameters not limited, is within the testing range of another approved method.** When requested in writing, the Division may approve an alternative analytical procedure or any significant modification to an approved procedure.

When the most sensitive analytical method which complies with this part, has a detection limit greater than or equal to the permit limit, the permittee shall report "less than (the detectable limit)," as appropriate. Such reports shall not be considered as violations of the permit limit. The present lowest practical quantitation limits (PQL) for specific parameters (which have limitations that are, in some cases, less than or equal to the detection limit) are as follows:

<u>Effluent Characteristic</u>	<u>PQLs, µg/l</u>
Aluminum	50
Arsenic	1
Cadmium	0.06
Chromium	2
Chromium, Hexavalent	2
Copper	5
Cyanide	10
Iron	10
Lead	1
Manganese	2
Mercury	0.003
Nickel	3
Phenols	15
Selenium	1
Silver	0.5
Uranium	1
Zinc	10

These limits apply to the total recoverable or the potentially dissolved fraction of metals.

For hexavalent chromium, samples must be unacidified so dissolved concentrations will be measured rather than potentially dissolved concentrations. The procedure for determining settleable solids is contained in 40 CFR 434.64. The practical quantitation limit for measuring settleable solids under this part shall be 0.4 ml/l.

If during the life of this permit, the Division considers the use of analytical procedures capable of producing lower practical quantitation limits to be appropriate for any of the above pollutants, this permit may be amended, in accordance with the Colorado Discharge Permit System Regulations (5 CCR 1002-61), in order to modify the practical quantitation limits listed above.

4. Records

The permittee shall establish and maintain records. Those records shall include the following:

- a. The date, type, exact location, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) the analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used;
- f. The results of such analyses; and
- g. Any other observations which may result in an impact on the quality or quantity of the discharge as indicated in 40 CFR 122.44 (i)(1)(iii).

The permittee shall retain for a minimum of three (3) years records of all monitoring information, including all original strip chart recordings for continuous monitoring instrumentation, all calibration and maintenance records, copies of all reports required by this permit and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Division or EPA.

5. Flow Measuring Device

If not already a part of the permitted facility, within ninety (90) days after the effective date of the permit, a flow measuring device shall be installed to give representative values of effluent quantities at the respective discharge points. Unless specifically exempted, or modified in Part I.E.5 of this permit, a flow measuring device will be applicable at all designated discharge points.

Note that for purposes of this permit, instantaneous flow measurements are permitted at Outfalls MON2 and MON3 that do not require the installation of flow measuring devices.

At the request of the Division, the permittee shall show proof of the accuracy of any flow-measuring device used in obtaining data submitted in the monitoring report. The flow-measuring device must indicate values within ten (10) percent of the actual flow being discharged from the facility.

6. Signatory and Certification Requirements

- a. All reports and other information required by the Division, shall be signed and certified for accuracy by the permittee in accord with the following criteria:
 - i) In the case of corporations, by a principal executive officer of at least the level of vice-president or his or her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the form originates;
 - ii) In the case of a partnership, by a general partner;
 - iii) In the case of a sole proprietorship, by the proprietor;
 - iv) In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- b. All reports required by permits, and other information requested by the Division shall be signed by a person as described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - i) The authorization is made in writing by a person described above;
 - ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and,
 - iii) The written authorization is submitted to the Division.

If an authorization as described in this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of this section must be submitted to the Division prior to or together with any reports, information, or applications to be signed by an authorized representative.

The permittee, or the duly authorized representative shall make and sign the following certification on all such documents:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

PART II

A. NOTIFICATION REQUIREMENTS

1. Notification to Parties

All notification requirements under this section shall be directed as follows:

- a. **Oral Notifications, other than for spills, during normal business hours** shall be to:

Water Quality Protection Section - Industrial Compliance Program
Water Quality Control Division
Telephone: (303) 692-3500

Spills notifications at any time and other notifications after hours shall be to:

Emergency Management Program
Laboratory and Radiation Services Division
Telephone: (877) 518-5608

- b. **Written notification** shall be to:

Water Quality Protection Section - Industrial Compliance Program
Water Quality Control Division
Colorado Department of Public Health and Environment
WQCD-WQP-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530

2. Change in Discharge

The permittee shall notify the Division, in writing, of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged, or;
- b. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported pursuant to an approved land application plan.

The permittee shall give advance notice to the Division of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

Whenever notification of any planned physical alterations or additions to the permitted facility is required pursuant to this section,, the permittee shall furnish the Division such plans and specifications which the Division deems reasonably necessary to evaluate the effect on the discharge, the stream, or ground water. If the Division finds that such new or altered discharge might be inconsistent with the conditions of the permit, the Division shall require a new or revised permit application and shall follow the procedures specified in Sections 61.5 through 61.6, and 61.15 of the Colorado Discharge Permit System Regulations.

3. Special Notifications - Definitions

- a. Bypass: The intentional diversion of waste streams from any portion of a treatment facility.
- b. Severe Property Damage: Substantial physical damage to property at the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. It does not mean economic loss caused by delays in production.

- c. Spill: An incident in which flows or solid materials are accidentally or unintentionally allowed to flow or escape so as to be lost from the treatment, processing or manufacturing system which may cause or threaten pollution of state waters.
- d. Upset: An exceptional incident in which there is unintentional and temporary noncompliance with permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

4. **Noncompliance Notification**

- a. If, for any reason, the permittee does not comply with or will be unable to comply with any discharge limitations or standards specified in this permit, the permittee shall, at a minimum, provide the Division and EPA with the following information:
 - i) A description of the discharge and cause of noncompliance;
 - ii) The period of noncompliance, including exact dates and times and/or the anticipated time when the discharge will return to compliance; and
 - iii) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.
- b. The permittee shall report the following circumstances **orally within twenty-four (24) hours** from the time the permittee becomes aware of the circumstances, and shall mail to the Division a written report containing the information requested in Part II.A.4 (a) **within five (5) days** after becoming aware of the following circumstances:
 - i) Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident;
 - ii) Circumstances leading to any unanticipated bypass which exceeds any effluent limitations in the permit;
 - iii) Circumstances leading to any upset or spill which causes an exceedance of any effluent limitation in the permit;
 - iv) Daily maximum violations for any of the pollutants limited by Part I.A of this permit and specified as requiring 24-hour notification. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance.
- c. The permittee shall report instances of non-compliance which are not required to be reported within 24-hours at the time Discharge Monitoring Reports are submitted. The reports shall contain the information listed in sub-paragraph (a) of this section.

5. **Other Notification Requirements**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule in the permit shall be submitted no later than fourteen (14) days following each scheduled date, unless otherwise provided by the Division.

The permittee shall notify the Division, in writing, thirty (30) days in advance of a proposed transfer of permit as provided in Part II.B.3.

The permittee's notification of all anticipated noncompliance does not stay any permit condition.

All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Division as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i) One hundred micrograms per liter (100 µg/l);

- ii) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and one milligram per liter (1.0 mg/l) for antimony;
 - iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with Section 61.4(2)(g).
 - iv) The level established by the Division in accordance with 40 C.F.R. § 122.44(f).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
- i) Five hundred micrograms per liter (500 µg/l);
 - ii) One milligram per liter (1 mg/l) for antimony; and
 - iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application.
 - iv) The level established by the Division in accordance with 40 C.F.R. § 122.44(f).

6. Bypass Notification

If the permittee knows in advance of the need for a bypass, a notice shall be submitted, at least ten days before the date of the bypass, to the Division. The bypass shall be subject to Division approval and limitations imposed by the Division. Violations of requirements imposed by the Division will constitute a violation of this permit.

7. Upsets

a. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with permit effluent limitations if the requirements of paragraph (b) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

b. Conditions Necessary for a Demonstration of Upset

A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed contemporaneous operating logs, or other relevant evidence that:

- i) An upset occurred and that the permittee can identify the specific cause(s) of the upset; and
- ii) The permitted facility was at the time being properly operated and maintained; and
- iii) The permittee submitted proper notice of the upset as required in Part II.A.4. of this permit (24-hour notice); and
- iv) The permittee complied with any remedial measure necessary to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

In addition to the demonstration required above, a permittee who wishes to establish the affirmative defense of upset for a violation of effluent limitations based upon water quality standards shall also demonstrate through monitoring, modeling or other methods that the relevant standards were achieved in the receiving water.

c. Burden of Proof

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

8. **Discharge Point**

Any discharge to the waters of the State from a point source other than specifically authorized by this permit is prohibited.

9. **Proper Operation and Maintenance**

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee as necessary to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when necessary to achieve compliance with the conditions of the permit.

10. **Minimization of Adverse Impact**

The permittee shall take all reasonable steps to minimize or prevent any discharge of sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. As necessary, accelerated or additional monitoring to determine the nature and impact of the noncomplying discharge is required.

11. **Removed Substances**

Solids, sludges, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed in accordance with applicable state and federal regulations.

For all domestic wastewater treatment works, at industrial facilities, the permittee shall dispose of sludge in accordance with all State and Federal regulations.

12. **Submission of Incorrect or Incomplete Information**

Where the permittee failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or report to the Division, the permittee shall promptly submit the relevant information which was not submitted or any additional information needed to correct any erroneous information previously submitted.

13. **Bypass**

- a. Bypasses are prohibited and the Division may take enforcement action against the permittee for bypass, unless:
 - i) The bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii) There were no feasible alternatives to bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - iii) Proper notices were submitted in compliance with Part II.A.4.
- b. "Severe property damage" as used in this Subsection means substantial physical damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- c. The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance or to assure optimal operation. These bypasses are not subject to the provisions of paragraph (a) above.
- d. The Division may approve an anticipated bypass, after considering adverse effects, if the Division determines that the bypass will meet the conditions specified in paragraph (a) above.

14. Reduction, Loss, or Failure of Treatment Facility

The permittee has the duty to halt or reduce any activity if necessary to maintain compliance with the effluent limitations of the permit. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production, control sources of wastewater, or all discharges, until the facility is restored or an alternative method of treatment is provided. This provision also applies to power failures, unless an alternative power source sufficient to operate the wastewater control facilities is provided.

It shall not be a defense for a permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B. RESPONSIBILITIES

1. Inspections and Right to Entry

The permittee shall allow the Division and/or the authorized representative, upon the presentation of credentials:

- a. To enter upon the permittee's premises where a regulated facility or activity is located or in which any records are required to be kept under the terms and conditions of this permit;
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit and to inspect any monitoring equipment or monitoring method required in the permit; and
- c. To enter upon the permittee's premises in a reasonable manner and at a reasonable time to inspect and/or investigate, any actual, suspected, or potential source of water pollution, or to ascertain compliance or non compliance with the Colorado Water Quality Control Act or any other applicable state or federal statute or regulation or any order promulgated by the Division. The investigation may include, but is not limited to, the following: sampling of any discharge and/or process waters, the taking of photographs, interviewing of any person having knowledge related to the discharge permit or alleged violation, access to any and all facilities or areas within the permittee's premises that may have any affect on the discharge, permit, or alleged violation. Such entry is also authorized for the purpose of inspecting and copying records required to be kept concerning any effluent source.
- d. The permittee shall provide access to the Division to sample the discharge at a point after the final treatment process but prior to the discharge mixing with state waters upon presentation of proper credentials.

In the making of such inspections, investigations, and determinations, the Division, insofar as practicable, may designate as its authorized representatives any qualified personnel of the Department of Agriculture. The Division may also request assistance from any other state or local agency or institution.

2. Duty to Provide Information

The permittee shall furnish to the Division, within a reasonable time, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Division, upon request, copies of records required to be kept by this permit.

3. Transfer of Ownership or Control

- a. Except as provided in paragraph b. of this section, a permit may be transferred by a permittee only if the permit has been modified or revoked and reissued as provided in Section 61.8(8) of the Colorado Discharge Permit System Regulations, to identify the new permittee and to incorporate such other requirements as may be necessary under the Federal Act.
- b. A permit may be automatically transferred to a new permittee if:
 - i) The current permittee notifies the Division in writing 30 days in advance of the proposed transfer date; and
 - ii) The notice includes a written agreement between the existing and new permittee(s) containing a specific date for transfer of permit responsibility, coverage and liability between them; and

- iii) The Division does not notify the existing permittee and the proposed new permittee of its intent to modify, or revoke and reissue the permit.
- iv) Fee requirements of the Colorado Discharge Permit System Regulations, Section 61.15, have been met.

4. Availability of Reports

Except for data determined to be confidential under Section 308 of the Federal Clean Water Act and the Colorado Discharge Permit System Regulations 5 CCR 1002-61, Section 61.5(4), all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division and the Environmental Protection Agency.

The name and address of the permit applicant(s) and permittee(s), permit applications, permits and effluent data shall not be considered confidential. Knowingly making false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Federal Clean Water Act, and Section 25-8-610 C.R.S.

5. Modification, Suspension, Revocation, or Termination of Permits By the Division

The filing of a request by the permittee for a permit modification, revocation and reissuance, termination or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

- a. A permit may be modified, suspended, or terminated in whole or in part during its term for reasons determined by the Division including, but not limited to, the following:
 - i) Violation of any terms or conditions of the permit;
 - ii) Obtaining a permit by misrepresentation or failing to disclose any fact which is material to the granting or denial of a permit or to the establishment of terms or conditions of the permit; or
 - iii) Materially false or inaccurate statements or information in the permit application or the permit.
 - iv) A determination that the permitted activity endangers human health or the classified or existing uses of state waters and can only be regulated to acceptable levels by permit modifications or termination.
- b. A permit may be modified in whole or in part for the following causes, provided that such modification complies with the provisions of Section 61.10 of the Colorado Discharge Permit System Regulations:
 - i) There are material and substantial alterations or additions to the permitted facility or activity which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit.
 - ii) The Division has received new information which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of different permit conditions at the time of issuance. For permits issued to new sources or new dischargers, this cause includes information derived from effluent testing required under Section 61.4(7)(e) of the Colorado Discharge Permit System Regulations. This provision allows a modification of the permit to include conditions that are less stringent than the existing permit only to the extent allowed under Section 61.10 of the Colorado Discharge Permit System Regulations.
 - iii) The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause only as follows:
 - (A) The permit condition requested to be modified was based on a promulgated effluent limitation guideline, EPA approved water quality standard, or an effluent limitation set forth in 5 CCR 1002-62, § 62 et seq.; and
 - (B) EPA has revised, withdrawn, or modified that portion of the regulation or effluent limitation guideline on which the permit condition was based, or has approved a Commission action with respect to the water quality standard or effluent limitation on which the permit condition was based; and
 - (C) The permittee requests modification after the notice of final action by which the EPA effluent limitation guideline, water quality standard, or effluent limitation is revised, withdrawn, or modified; or

- (D) For judicial decisions, a court of competent jurisdiction has remanded and stayed EPA promulgated regulations or effluent limitation guidelines, if the remand and stay concern that portion of the regulations or guidelines on which the permit condition was based and a request is filed by the permittee in accordance with this Regulation, within ninety (90) days of judicial remand.
- iv) The Division determines that good cause exists to modify a permit condition because of events over which the permittee has no control and for which there is no reasonable available remedy.
- v) The permittee has received a variance.
- vi) When required to incorporate applicable toxic effluent limitation or standards adopted pursuant to § 307(a) of the Federal act.
- vii) When required by the reopener conditions in the permit.
- viii) As necessary under 40 C.F.R. 403.8(e), to include a compliance schedule for the development of a pretreatment program.
- ix) When the level of discharge of any pollutant which is not limited in the permit exceeds the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under Section 61.8(2) of the Colorado Discharge Permit System Regulations.
- x) To establish a pollutant notification level required in Section 61.8(5) of the Colorado Discharge Permit System Regulations.
- xi) To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions, to the extent allowed in Section 61.10 of the Colorado State Discharge Permit System Regulations.
- xii) When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.
- xiii) For any other cause provided in Section 61.10 of the Colorado Discharge Permit System Regulations.
- c. At the request of a permittee, the Division may modify or terminate a permit and issue a new permit if the following conditions are met:
 - i) The Regional Administrator has been notified of the proposed modification or termination and does not object in writing within thirty (30) days of receipt of notification,
 - ii) The Division finds that the permittee has shown reasonable grounds consistent with the Federal and State statutes and regulations for such modifications or termination;
 - iii) Requirements of Section 61.15 of the Colorado Discharge Permit System Regulations have been met, and
 - iv) Requirements of public notice have been met.
- d. Permit modification (except for minor modifications), termination or revocation and reissuance actions shall be subject to the requirements of Sections 61.5(2), 61.5(3), 61.6, 61.7 and 61.15 of the Colorado Discharge Permit System Regulations. The Division shall act on a permit modification request, other than minor modification requests, within 180 days of receipt thereof. Except for minor modifications, the terms of the existing permit govern and are enforceable until the newly issued permit is formally modified or revoked and reissued following public notice.
- e. Upon consent by the permittee, the Division may make minor permit modifications without following the requirements of Sections 61.5(2), 61.5(3), 61.7, and 61.15 of the Colorado Discharge Permit System Regulations. Minor modifications to permits are limited to:
 - i) Correcting typographical errors; or

- ii) Increasing the frequency of monitoring or reporting by the permittee; or
 - iii) Changing an interim date in a schedule of compliance, provided the new date of compliance is not more than 120 days after the date specific in the existing permit and does not interfere with attainment of the final compliance date requirement; or
 - iv) Allowing for a transfer in ownership or operational control of a facility where the Division determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees has been submitted to the Division; or
 - v) Changing the construction schedule for a discharger which is a new source, but no such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge; or
 - vi) Deleting a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.
- f. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term.
- g. The filing of a request by the permittee for a permit modification, revocation and reissuance or termination does not stay any permit condition.
- h. All permit modifications and reissuances are subject to the antibacksliding provisions set forth in 61.10(e) through (g).

6. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 (Oil and Hazardous Substance Liability) of the Clean Water Act.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority granted by Section 510 of the Clean Water Act.

8. Permit Violations

Failure to comply with any terms and/or conditions of this permit shall be a violation of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

9. Property Rights

The issuance of this permit does not convey any property or water rights in either real or personal property, or stream flows, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Severability

The provisions of this permit are severable. If any provisions of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the application of the remainder of this permit shall not be affected.

11. Renewal Application

If the permittee desires to continue to discharge, a permit renewal application shall be submitted at least one hundred eighty (180) days before this permit expires. If the permittee anticipates there will be no discharge after the expiration date of this permit, the Division should be promptly notified so that it can terminate the permit in accordance with Part II.B.5.

12. Confidentiality

Any information relating to any secret process, method of manufacture or production, or sales or marketing data which has been declared confidential by the permittee, and which may be acquired, ascertained, or discovered, whether in any sampling investigation, emergency investigation, or otherwise, shall not be publicly disclosed by any member, officer, or employee of the Commission or the Division, but shall be kept confidential. Any person seeking to invoke the protection of this Subsection (12) shall bear the burden of proving its applicability. This section shall never be interpreted as preventing full disclosure of effluent data.

13. Fees

The permittee is required to submit payment of an annual fee as set forth in the 2005 amendments to the Water Quality Control Act. Section 25-8-502 (l) (b), and the Colorado Discharge Permit System Regulations 5 CCR 1002-61, Section 61.15 as amended. Failure to submit the required fee when due and payable is a violation of the permit and will result in enforcement action pursuant to Section 25-8-601 et. seq., C.R.S. 1973 as amended.

14. Duration of Permit

The duration of a permit shall be for a fixed term and shall not exceed five (5) years. Filing of a timely and complete application shall cause the expired permit to continue in force to the effective date of the new permit. The permit's duration may be extended only through administrative extensions and not through interim modifications.

15. Section 307 Toxics

If a toxic effluent standard or prohibition, including any applicable schedule of compliance specified, is established by regulation pursuant to Section 307 of the Federal Act for a toxic pollutant which is present in the permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in the discharge permit, the Division shall institute proceedings to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

16. Antibacksliding

- a. A permit may not be renewed, reissued, or modified to contain effluent limitations adopted pursuant to Section 25-8-503(1)(b) (BPJ) of the Water Quality Control Act, which are less stringent than the comparable effluent limitations or standards in the previous permit, unless any one of the following exceptions is met and the conditions of paragraph (c) of this section are met:
 - i) Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of less stringent effluent limitations; or
 - ii) Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation or standard at the time of permit issuance; or
 - iii) The Division determines that technical mistakes or mistaken interpretations of law were made in issuing the permit, which justified relaxation of the effluent limitations or standards; or
 - iv) A less stringent effluent limitation or standard is necessary because of events over which the permittee has no control and for which there is not reasonable available remedy; or
 - v) The permittee has received a permit variance; or
 - vi) The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case, the limitations in the renewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).
- b. A permit may not be renewed, reissued, or modified to contain effluent limitations adopted pursuant to 61.8(2)(b) or (c) of the Colorado Discharge Permit System Regulations that are less stringent than the comparable effluent limitations in the

previous permit, unless any of the exceptions provided herein is met and the conditions of paragraph c. of this section are met.

- i) In waters where the applicable water quality standard has not yet been attained, effluent limitations based on a total maximum daily load or other waste load allocation may be revised to be less stringent if the cumulative effect of all such revisions assures attainment of such water quality standard, or the designated use which is not being attained is removed in accordance with Section 31.6 of the Basic Standards.
- ii) In waters where the applicable water quality standard has been attained, effluent limitations based on a total maximum daily load, other waste load allocation, or any other permitting standard (including any water quality standard) may be revised to be less stringent if such revision is subject to and consistent with the antidegradation provisions of Section 31.8 of the Basic Standards. Consistency with Section 31.8 shall be presumed if the waters in question have been designated by the Commission as "use protected"; or
- iii) Whether or not the applicable water quality standard has been attained:
 - (A) Material and substantial alterations or additions to the permitted facility occurred after permit issuance which justified the application of less stringent effluent limitations; or
 - (B) A less stringent effluent limitation is necessary because of events over which the permittee has no control and for which there is not reasonable available remedy; or
 - (C) The permittee has received a permit variance; or
 - (D) The permittee has installed the treatment facilities required to meet the effluent limitations in the previous permit and has properly operated and maintained the facilities but has nevertheless been unable to achieve the previous effluent limitations, in which case, the limitations in the reviewed, reissued, or modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by effluent guidelines in effect at the time of permit renewal, reissuance, or modification).
- c. In no event may a permit with respect to which paragraphs (a) and (b) of this section apply be renewed, reissued, or modified to contain an effluent limitation or standard which is less stringent than required by federal effluent guidelines in effect at the time the permit is renewed, reissued, or modified. In no event may such a permit to discharge into state waters be renewed, reissued, or modified to contain a less stringent effluent limitation if the implementation of such limitation would result in a violation of an applicable water quality standard.

17. Effect of Permit Issuance

- a. The issuance of a permit does not convey any property rights or any exclusive privilege.
- b. The issuance of a permit does not authorize any injury to person or property or any invasion of personal rights, nor does it authorize the infringement of federal, state, or local laws or regulations.
- c. Except for any toxic effluent standard or prohibition imposed under Section 307 of the Federal act or any standard for sewage sludge use or disposal under Section 405(d) of the Federal act, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with Sections 301, 302, 306, 318, 403, and 405(a) and (b) of the Federal act. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in Section 61.8(8) of the Colorado Discharge Permit System Regulations.
- d. Compliance with a permit condition which implements a particular standard for sewage sludge use or disposal shall be an affirmative defense in any enforcement action brought for a violation of that standard for sewage sludge use or disposal.

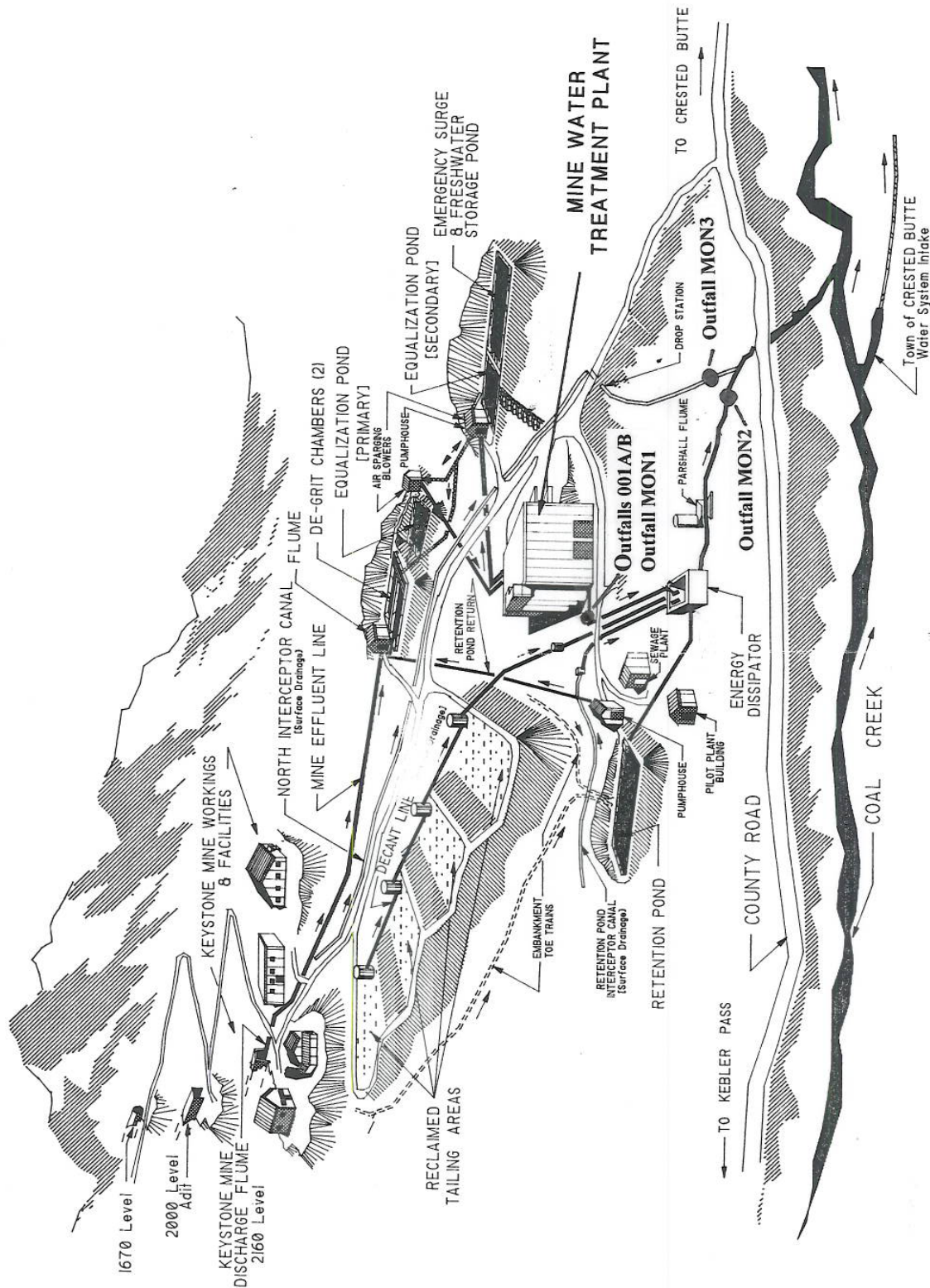


Figure 1. Schematic of Facility Layout and Outfalls